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METHODS AND APPARATUS FOR PERFORMING EFFICIENT INVERSE TRANSFORM OPERATIONS

Abstract of the Disclosure

According to the present invention, methods and apparatus for performing efficient inverse transform operations are provided. Zero patterns are identified in a block of transform coefficients to derive zero pattern information. Using the zero pattern information, inverse transform operations are performed on a subset of the columns of the block of transform coefficients. Zero patterns can optionally be identified in the resulting block. One-dimensional inverse transform operations are then performed on the rows of the resulting block to complete the inverse transform. In another example, one-dimensional inverse transform operations can be performed first on the rows and then on the columns.